

PERLI, S.B., kand.tekhn.nauk; MEL'NICHENKO, N.P., inzh.; SHEVEL'KOV, V.G.,
inzh.; CHANDER, Yu.I., inzh.

Improvement in gas purification in electrostatic precipitators of
drying drums. TSement 30 no.6:17-19 N-D '64.

(MIRA 18:1)
1. Gosudarstvennyy institut po proyektirovaniyu tsementnykh
zavodov v yuzhnykh rayonakh SSSR.

PERLI, S.B.; TISTROVA, O.N., redaktor; BABOCHKIN, S.N., tekhnicheskiy
rektor.

[High-speed windmills] Bystrokhodnye vetrianye dvigateli. Moskva,
Gos. energeticheskoe izd-vo, 1951. 214 p. (MIRA 8:4)
(Windmills)

PERLI, S.B., kandidat tekhnicheskikh nauk.

Comparative experiments with high-speed PD-5 and low-speed TV-5 wind mills
(in connection with the article by M.M.Chirkov). Sel'khozmaschina no.9:13-15
S '59. (MLRA no.9)

(Windmills)

PERLI, S. B.; EDEL'MAN, I. Ye.; PAL'CHIK, Yu. R.

Breaking in an electrostatic filter for automatic shaft kilns.
TSement 29 no.2:18-19 Mr-Apr '63. (MIRA 16:4)

1. Yizhgiprotsement.

(Dust collectors) (Cement plants)

PERLI, S.B., kandidat tekhnicheskikh nauk.

Answer to the critique by L.A. I. Snefter and M.V. Rozhdestvenskii of the book
"High-speed windmills." Sel'khoz mashina no. 9:11-13 S '53. (MLRa 6:9)
(Windmills)

PERLI, S.B., kand.tekhn.nauk; BERNSHTEYN, L.A., inzh.; EDEL'MAN, I.Ye., inzh.

Reviews and bibliography. TSemant 31 no.5:24 8-0 '65.

(MIRA 18:10)

PERLI, Semen
KAZHINSKIY, Bernard Bernardovich; ~~PERLI, Semen Borisovich~~; ~~YEFREMOVA, Ye.~~,
redaktor; ANDRIANOV, B., ~~tekhnicheskii redaktor~~

[Homemade wind power electric stations] Samodel'naya vetroelektro-
stantsiia. Moskva, Izd-vo DOSAAF, 1956. 93 p. (MLRA 10:6)
(Windmills) (Electric power plants)

PERI, S. S.

Peri, S. S.

"High-speed wind mills." Reviewed by Ye. I. Gelfer, I. V. Rozhnovskiy.
Sel'khozgiz izd. no. 5, 1951.

Monthly list of Russian acquisitions, Library of Congress. Aug. 51, 1951. 1000000000.

PERLI, S.B.; EDEL'MAN, I.Ye.

Cooling clinkers in recuperators of rotary kilns. TS:ment 30
no. 2:11-12 Mr-Ap '64. (MIRA 17:5)

1. Gosudarstvennyy institut po proyektirovaniyu tsementnykh
zavodov v yuzhnykh rayonakh SSSR.

SATARIN, Vladimir Ivanovich; PERLI, Semen Borisovich; BANIT, F.G., inzh.,
nauchnyy red.; TIUTYUNIK, M.S., red.izd-va; OSENKO, L.M.,
tekh.n.red.

[Motion of and removing dust from gases in manufacturing cement]
Dvizhenie i obespylianie gazov v tsementnom proizvodstve. Moskva,
Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960.
304 p. (MIRA 13:10)

(Gases--Purification)
(Cement plants--Equipment and supplies)

Perlia, A. N.

PERLIA, A. N.

Effect of treatment of hypertonic diseases with intravenous injections of magnesium sulphate. Kiz. med., Moskva 28:6, June 50. p. 92-3

1. Riga.

CLIL 19, 5, Nov., 1950

PERLIA, Z.

O stankakh i kalibrakh (Iz istorii stankostroeniia i metalloobrabotki)
[Machine tools and gages (from the history of machine-tool building
and metalworking)]. Moskva, Trudrezervizdat, Moskva, 1952. 124 p.

SO: Monthly List of Russian Accessions. Vol. 6 No. 7 October 1953

IELIA, Zigmund Naumovich.

Moskva. Molodaja gvardia, 1944. 126 s. (40-32554)

TJ1185.137

PERLIA, Zigmund Naunovich.

The impact under the water; mine and torpedo. Moskva, Voenno-morskoe izd-vo, 1945. 246 p.

(52-40214)

V850.P4

PERLIA, Ya. Z.

How radar works. Moskva, Gos. izd-vo obr. i bezop. 1955. 112 p. (55-4 210

TX5575.144

1. Radar.

PERLIA, ZIGMUND NAUMOVICH.

Chudesnye stanki. (Moskva) "Molodai gvardii," 1944. 126, (2) p. illus. (Incl. ports)

Wonderful machine tools.

NN

DLC: TJ1230.P67 1956

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953

PRODIKH, M. P.

Agrotekhnika plodonosivshchego vinogradnika [Agrotechnology of fruit-bearing vineyard]. Tashkent, Izd. Akad. nauk Uzbeskoi SSR, 1952. 72 p.

SO: Monthly List of Russian Accessions, Vol. 6, No. 2, May 1953

PERLICK, R.

FOR / Chemical Technology. Chemical Products and Their Use
Application. Instruments and Automation.

Abstr Jour: Ref Zh Khim., No 23, 1953, 1756.

Author : Perllick, R.

Instr : Not given.

Title : Measurement of combustibility properties of gases.

Orig Pub: Industriestrich, 1957, 5, No 12, 143-144, 145-146.
Ref Zh, 141-142.

Abstract: An instrument for measuring the rate of
combustion of gases and their mixtures is described.
The action of the instrument is based on the meas-
urement of the speed of escaping gas. It was
found that the heating power of a gas depends on
its spec. gravity. The speed of the escaping gas
is determined by the length of column of flame
under constant pressure. The instrument corre-
sponds accordingly to the determined spec. gravity
and to the heat power of the gas. -- Va. Bozovets.

Card 1/1

PERLICKI, S.

"The Problem of Damages and Their Prevention in the Oil Industry." p. 48 (NAFTA, Vol. 9, No. 2, Feb. 1953) Warszawa

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2, No. 10, October 1953. Unclassified.

PERLIK, E.; DOICHINOV, A.

Current possibilities for control of anticoagulant prophylaxis and therapy. Khirurgiia, Sofia 14 no.9:769-777 '61.

1. Universitet "Karl Marks", Laipstsig. Meditsinska universitetska klinika. Zav. katedra: prof. Rolf Emrikh i Nauchna khematologichna laboratoriiia. Zav. laboratoriiia: prof. E. Perlik.

(ANTICOAGULANTS ther)

PERLIK, G. D.

Taktika aviatsii i primeneniye aeroplanov v voennom dele. [Aviation tactics and the use of airplanes in the military field]. Lektsii, chitannyya liestom 1916 g. v Sevastopol'skoi voennoi aviatsionnoi shkolie. Simferopol', 1916. 93 p. diagrs.

DLC: DG630.F39

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified

BOCHKAREV, V.P., kand. geol.-miner. nauk; NIKITINA, L.G., kand. geol.-miner. nauk; SHAPIRO, S.M., kand. geol.-miner. nauk; EYLINGVA, N.M., st. inzh.; GOLCHIKOD'KO, G.L., inzh.; PERLIK, G.P., inzh.; BANDALETOV, S.M., kand. geol.-miner. nauk; VLADIMIROV, N.M., kand. geol.-miner. nauk; SADYKOV, A.M., kand. geol.-miner. nauk; MALYSHEV, Ye.G., ml. nauchn. sotr.; BERKALIYEV, N.A., st. inzh.; EYDINOV, Yu.I., st. inzh.; MUKHAMEDZHANOV, S.M., kand. geol.-miner. nauk; ISABAYEV, T.T., st. inzh.; MOTOV, Yu.A., inzh.; KOLOTILIN, N.F., kand. geol.-miner. nauk; LAPIDUS, Zh.D., inzh.; SHOYMANOVA, M.M., inzh.; YAREMCHUK, G.S., inzh.; BAKHOTOV, MARNI A.V., kand. miner. nauk [deceased]; MIKHAYLOV, B.P., st. inzh.; SATPAYEV, K.I., akademik, glav. red. [deceased]; MEDOYEV, G.TS., otv. red.; DMITROVSKIY, V.I., red.; SEMENOV, I.S., red.; BRAILOVSKAYA, M.Ye., red.; KORO LEVA, N.N., red.

[Irtysh-Karaganda Canal; engineering geological conditions]
Kanal Irtysh - Karaganda; inzhenerno-geologicheskie usloviia.
Alma-Ata, Nauka, 1965. 169 p. (MIRA 18:5)

(Continued on next card)

PERLIK, Vlastimil

Finishing operations in blade production. Zpravodaj VZLU
no.3:133-139 '63.

PERLIN, A., inzh.

Automatic control system for insulation resistance in circuits.
Mor.flot 18 no.3:24-25 Mr '58. (MIRA 11:4)

1. Tsentral'noye proyektno-konstruktorskoye byuro No.3 Ministerstva
morekogo flota.
(Electric insulators and insulation)

ZHIVOTOVSKIY, A.A., inzh.; PERLIN, A.A., inzh.; REKSHINSKIY, M.S., inzh.;
SHALKIN, M.K., inzh.

In defense of structural elements without knees. Sudostroenie
29 no.9:9-10 8 '63. (MIRA 16:11)

DAVYDOV, Vadim Vasil'yevich, prof.; MATTES, Nataliya Viktorovna, prof.;
SIVCHENKOV, Ivan Nikolayevich, prof.; PERLIN, A.A., inzh., red.;
VITANSKIY, S.A., red. izd-va.; GORCHAKOV, G.H., tekhn.red.

[Study manual on the resistance of ships in inland navigation]
Uchetnyi spravochnik po prochnosti sudov vnutrennego plavaniia.
Izd. 2., perer. i dop. Moskva, Izd-vo "Rechnoi transport," 1953. 754 p.
(MIRA 11:12)

(Ship resistance)

124-57-1-1063

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 1, p 148 (USSR)

AUTHOR: Perlin, A. A.

TITLE: Calculation of a Ceiling With Staggered Frames and Floorplates
(Raschet perekrytiy s chereduyushchimisya ramami i florami)

PERIODICAL: Tr. Gor'kovsk. politekhn. in-ta, 1956, Vol 11, Nr 4, pp 88-92

ABSTRACT: Bibliographic entry

1. Structures--Mathematical analysis--Bibliography

Card 1/1

RCDZHEGO, N.I.; FERLIN, A.I.; ROK, A.I., red.

[Operation of the electrical equipment of ships] Ope-
ratatsia s novoye elektricheskoye na. Moskva,
Transport, 1964. 209 p. (Mir 16:1)

ITSKOVICH, Yuriy Leonidovich. Prinimali uchastiye: PERLIN, A.I., inzh.; KAZIMIRSKIY, B.O., inzh.; BEN'KOVSKIY, D.D., dots.; TURKEL'TAUB, G.M., nauchnyy sotr.; POIYAKOV, G.I., inzh., retsenzent; ANTONOV, S.I., inzh., nauchnyy red.; LAPINA, Z.D., red. izd-va; TIKHONOVA, Ye.A., tekhn. red.

[The technology of the repair and installation of marine electric systems] Tekhnologiya sudovykh elektroremontnykh i elektromontazhnykh rabot. Moskva, Izd-vo "Morskoi transport," 1961. 273 p.

(MIRA 14:10)

(Ships—Electric equipment) (Ships—Maintenance and repair)

PERLIN, B.

Prospects for the development and distribution of flax raising in
Smolensk Province. Vop.geog. no.49:134-148 '60. (MIRA 13:8)
(Smolensk Province--Flax)

PROCEDURES AND PROPERTIES INDEX	
F	2707. THE ELECTRICITY SUPPLY INDUSTRY IN SOVIET RUSSIA. Hopec L. and Perlin, B. (Electrotech. Obzor, Nov. 1945, 34, Nos. 15-16, 228-30; Engrs' Dig., Aug. 1946 7, 230-1) The development of electricity supply in the U.S.S.R. since 1920 made Russia the third largest electricity producer in the world. The success of electrification in Russia is attributed to five basic principles: electricity production and consumption are treated and planned for as one economic unit; emphasis is laid on the utilization of local low grade fuels; electricity production is combined with steam supply for the purpose of obtaining higher thermal efficiency; water power is used whenever possible; and a unified high tension transmission system is being built for the whole country. Construction of power stations has been speeded up. As regards the organization of electricity supply, reliability, economy are the main concerns. The interest of the State are put
ASB.ELA METALLURGICAL LITERATURE CLASSIFICATION	
FROM SOURCE	
REMARKS	

before local interests. A central planning commission supervises the planning for all four groups of electricity supply undertakings. The management of the individual supply undertakings rests with one man nominated by the Ministry for Electricity Supply. The works council assists him in management and cooperates with him on social and cultural problems. Rigid discipline is enforced; the manager can dismiss any member of the staff of his own responsibility but the works council can appeal to higher authorities if it disagrees, which has not yet occurred. Each supply undertaking is given a definite task. The staff participates in any profit arising from a better performance than is prescribed. Wages are determined by qualifications and work done by the individual. A minimum of work is required from each employee but heavy workers have higher wages, more food, longer holidays and shorter hours.

2707. THE ELECTRICITY SUPPLY INDUSTRY IN THE U.S.S.R. (Electrotech. Obzor, Nov. 1945, 34, No. 15-16, 229-30; Engrs' Dig., Aug. 1946 7, 230-1). The development of electricity supply in the U.S.S.R. since 1920 made Russia the third largest electricity producer in the world. The process of electrification in Russia is attributed to five basic principles: electricity production and consumption are treated and planned for as one economic unit; emphasis is laid on the utilization of local low grade fuels; electricity production is combined with steam supply for the purpose of obtaining higher thermal efficiency; water power is used whenever possible; and a unified high tension transmission system is being built for the whole country. Construction of power stations has been speeded up. As regards the organization of electricity supply, reliability, economy are the main concerns. The interest of the State are put

ASS-51A METALLURGICAL LITERATURE CLASSIFICATION

FROM SOURCE

SELECT ONE ONLY

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

before local interests. A central planning commission supervises the planning for all four groups of electricity supply undertakings. The management of the individual supply undertakings rest with one man nominated by the Ministry for Electricity Supply. The works council assists him in management and cooperates with him on social and cultural problems. Rigid discipline is enforced; the manager can dismiss any member of the staff of his own responsibility but the works council can appeal to higher authorities if it disagrees, which has not yet occurred. Each supply undertaking is given a definite task. The staff participates in any profit arising from a better performance that is prescribed. Wages are determined by qualifications and work done by the individual. A minimum of work is required from each employee but no workers have higher wages, more food, longer holidays and shorter hours.

VASIL'YEV, V G., kand. geogr. nauk, ctv. red.; FOGULYAYEV, D.I.,
doktor geol.-miner. nauk, red.; FERLIN, B.I., kand.
geogr. nauk, red.; GREL'CHENKO, T.M., kand. Ser'khoz. nauk,
red.; BUDAYEV, D.I., kand. ist. nauk, red.

[Atlas of Smolensk Province; dedicated to the 1100th anni-
versary of Smolensk] Atlas Smolenskoï oblasti; posviashchaetsia
1100-letiu Smolenska. Moskva, 1964. 31 p. (MIRA 18:3)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i
kartografii.

abstract
PERLIN, B.N., Cand Geog Sci -- (diss) "Author's ~~review~~ of
dissertation *in competition for academic*
~~as part of joint research project for the~~ degree
of candidate of geographic sciences on the subject, 'Development
and distribution of cultivation of flax in Smolenskaya Oblast'."
Mos 1958, 19 pp. (Mos Order of Lenin and Order of Labor Red
Banner State Univ im M.V. Lomonosov)(KL, 32-58, 107)

PERLIN, B. N.

" The Organization of Leading Agricultural Branches on the Example of Flax Cultivation in the Smolensk Oblast"

report presented at an Inter-University Conference on Dividing the USSR into Economic Regions, 1-5 February 1958, Moscow, (Izv. Ak. nauk SSSR, 4, 146-49; 1958 author - Gvozdetakiy, N. A.)

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSES AND PROPERTIES AND																			
Maryar Koslodes, Mely-Es Vizsopites Communication and civil engineering in Hungary vol. II 1950 no. 11, november																			
1. Table																			
2. Table																			
3. Table																			
4. Table																			
5. Table																			
6. Table																			
7. Table																			
8. Table																			
9. Table																			
10. Table																			
11. Table																			
12. Table																			
13. Table																			
14. Table																			
15. Table																			
16. Table																			
17. Table																			
18. Table																			
19. Table																			
20. Table																			
21. Table																			
22. Table																			
23. Table																			
24. Table																			
25. Table																			
26. Table																			
27. Table																			
28. Table																			
29. Table																			
30. Table																			
31. Table																			
32. Table																			
33. Table																			
34. Table																			
35. Table																			
36. Table																			
37. Table																			
38. Table																			
39. Table																			
40. Table																			
41. Table																			
42. Table																			
43. Table																			
44. Table																			
45. Table																			
46. Table																			
47. Table																			
48. Table																			
49. Table																			
50. Table																			
51. Table																			
52. Table																			
53. Table																			
54. Table																			
55. Table																			
56. Table																			
57. Table																			
58. Table																			
59. Table																			
60. Table																			
61. Table																			
62. Table																			
63. Table																			
64. Table																			
65. Table																			
66. Table																			
67. Table																			
68. Table																			
69. Table																			
70. Table																			
71. Table																			
72. Table																			
73. Table																			
74. Table																			
75. Table																			
76. Table																			
77. Table																			
78. Table																			
79. Table																			
80. Table																			
81. Table																			
82. Table																			
83. Table																			
84. Table																			
85. Table																			
86. Table																			
87. Table																			
88. Table																			
89. Table																			
90. Table																			
91. Table																			
92. Table																			
93. Table																			
94. Table																			
95. Table																			
96. Table																			
97. Table																			
98. Table																			
99. Table																			
100. Table																			

FERLIN B. Z.

"Participation of the Vagus Nerve in the Innervation of the Ileocecal Section of the Intestines." Cand Med Sci, Kishinev State Medical Inst, Kishinev, 1955.
(KL, No 16, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific And Technical Dissertations
Defended at USSR Higher Educational Institutions (16).

CZECHOSLOVAKIA

UDC 356.33:613.294:577.16

HUTAK, D.; KRYSA, I.; TRETERA, V.; PERLIN, C.; KLAUS, K.; [Affiliation not given].

"The Question of Supplying Vitamin in the Form of Ascorbic Acid to Soldiers."

Prague, Vojenske Zdravotnicke Listy, Vol 35, No 4, Aug 66, pp 158 - 162

Abstract [Authors' English summary modified]: Soldiers suffered from a large seasonal deficiency of vitamin C in the part of the army in which an investigation was made. 100 mg per day was administered daily for a period of 3 months to a group of soldiers; this group had a serum level of 0.5 mg% against 0.21-0.29 mg % found in the control group. In a group which received 600 mg of ascorbic acid once a week for 3 weeks the level was kept at 0.7 mg%. Such rapid administration should be made only when the normal supply (100 mg daily) cannot be administered. 3 Figures, 3 Tables, 4 Western, 10 Czech, 4 Russian, 1 Egyptian reference.

1/1

- 38 -

Observation of the nutritional status of soldiers. Ascorbic acid saturation. Czech. gastroent. vyz. 1966, 35:365-368.

1. Vojensky ustav hygieny, mikrobiologie a epidemiologie v Praze.

PERLIN, Ctábor, inz.

Scalding the water fowl. Prum potravin 13 no.4:185-188 Ap
'62.

1. Sdruzeni drubezarskeho prumyslu, vyzkumne pracoviste,
Ivanka pri Dunaji.

PERIODIC

Table for the computation of the perturbations of elements
having an eccentric anomaly as an independent variable. (1) 1.
Inst. test. action. 3 n 9 607-624 '64. 14/84 12 1'

PERLIN, F.Kh.

Method of variation of arbitrary constants with the eccentric
anomaly as the independent variable. *Biul.Inst.teor.astron.*
8 no.6:429-443 '62. (MIRA 25:8)
(Mechanics, Celestial)

PERLIN, P.Kh.

Constant of the moon's parallax. Biul.Inst.teor.astron.
6 no.8:566-576 '57. (MIRA 13:3)
(Parallax--Moon)

PERLIN, G.M.

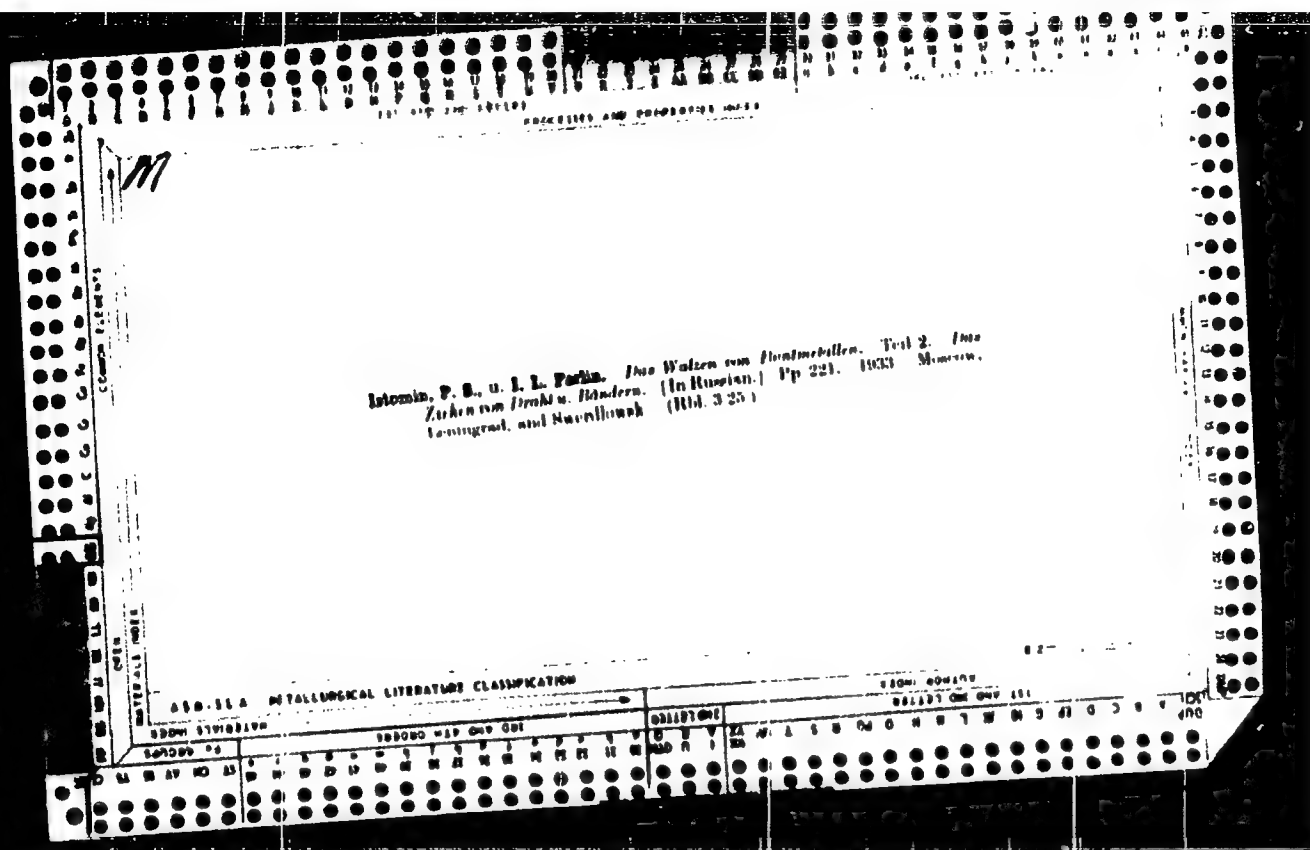
A.I.Skrebitskiy (1827-1916); bibliographic note. Vest.oft. 70 no.3:
57-58 My-Je '57. (MLRA 10:8)
(SEREBITSKII, ALEKSANDR IL'ICH, 1827-1916)

PERLIN, G.M. (Stalingrad)

▲ historical comment on K.I.Giubental's lithotrite; 125th anniversary
of this invention in Russia. Urologia 21 no.1:58-59 Ja-Mr '56.

(MLRA 9:12)

(UROLOGY, appar. and instruments
calculifragous instrument of K.I.Giubental')



1ST AND 2ND CODES										100 AND 4TH CODES									
PROCESSES AND PROPERTIES INDEX																			
<i>Perin, L. L. The Drawing of Non-Ferrous Metals and Their Alloys. (In Russian.) Pp. 324. 1934. Moscow, Leningrad, and Sverdlovsk: Metallurgizdat. (Hbl. 4.25.)</i>																			
ASB-5LA METALLURGICAL LITERATURE CLASSIFICATION																			
BOOKS										PERIODICALS									
100000 00										000000 000000									

m. 9.

On the Production of Wire and Rods from Complex Non-Ferrous Alloys
1. I. Polun (Zvezda, Moscow, 1940, 111, 111, 2298).—In Russian. It discusses the problem of rolling
for the production of ingots, and for the first and main stages of rolling
of non-ferrous alloys, such as nickel-manganese, nickel-silver, Constantan,
Nimel, Manganin, Chromel, etc.

1943

PERLIN, I. L.

Engineer. "Means of eliminating the Blistering Surface from Copper Wire Bars" Izvet. Met.
14, No 9, September 1939.

Report U-1506, 4 Oct. 1951.

PERLIN, I. L., ed.

Moscow. Friction and lubrication in treating non-ferrous metals; experimental data.
Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po cherno i tsvetnoi metallurgii, 1945. 108 p.
(52-64177)

TS460.M68

Ph-24T72

PERLIN, I. L.

Ussr/Metals
Feeling - Production
Business Analysis

Jul/Aug 1947

Method of Approximate Calculation of the Amount of Stress During the Expansion of Pipes," Prof I. L. Perlin, Ministry of Nonferrous Metallurgy and Gold, 4 pp

"Average Metally" No 4

Sometimes nonferrous tubes are manufactured in very great dimensions, but because of the difficulty of production, the author asks whether or not the size of pipes is determined by the size of the pipe manufacturing apparatus. At present such over-size pipes are made by expansion. The author presents 24T72

Ussr/Metals (Contd)

Jul/Aug 1947

mathematical formulas for the calculation of the stresses which affect the pipe during its period of expansion.

24T72

RAZUMOV, I.M.; PERLIN, I.L.; PRIYMAK, I.A., retsenzent; KAZAKEVICH, I.E.,
retsenzent; SHUKHAI'TER, L.Ya., redaktor; SHEKHODINA, I.P.,
tekhnicheskii redaktor.

[Production norms in the non-ferrous metal industry] Tekhnicheskoe
normirovanie v tsvetnoi metalloobrabatyvaiushchei promyshlennosti.
Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po cherno i tsvetnoi
metallurgii, 1951. 201 p. (MLRA 8:2)
(Efficiency, Industrial) (Metal industries)

PERLIN, I.L.; VATRUSHIN, L.S.

Effect of method of deformation on the structure and strength
properties of copper. Issl. splav. tsvet. met. no.4:204-210 '63.

(MIRA 16:8)

(Copper--Testing) (Deformations (Mechanics))

Ferlin, I. L.

"Calculation of the Working Stresses During Extrusion of Solid Round Shapes",
Tsvetnyye Metally, 1951, Nr 6.

Perlin, I. L.

"On the Calculation of the Pulling Force in Wire Drawing", Obrabotka Metallov
Davleniyem, Sbornik Statey, Vol 1, Metallurgizdat, 1952.

Perlin, I. L., and Ivanov, A. I.

"Determination of the Stress in the Elastic Part of the Deformation Zone in Wire Drawing", Sbornik Obrabotka Tsvetnykh Metallov i Splavov, Metallurgizdat, 1953.

PERLIN, I.L., professor; SOKOLOV, Yu.A., inzhener.

Longitudinal profile of diamond dies for molybdenum wire. Tsvet.
mat. 26 no.2:65-69 Mr-Apr '53. (MLRA 10:9)
(Wire drawing)

Perlin, I. L.

"On the Problem of the Method of Calculating the Working Stresses During Extrusion and Wire Drawing", Tsvetnyye Metally, 1954, Nr 1, p. 62.

PERLIN, I.L.; GODENZIAN, K.K.

Graphic analysis of pressure distribution along the arc of
gripping in rolling with smooth rolls. Obr.met.davl. no.3:
49-62 '54. (MIRA 12:10)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy
institut obrabotki tsvetnykh metallov "(Iprotsvetmetobrabotka,"
(Rolling (Metalwork))

PERLIN, I.L., prof.

Determining conditions of metal gripping in inclined roll
piercing mills. Obr.met.davl. no.3:148-152 '54.
(MIRA 12:10)

1. Moskovskiy institut tsvetnykh metallov i zolota im. M.I.Kalini-
na.

(Rolling (Metalwork))

PERLIN, I.L.

Problem and method of calculating working stresses during pressing
and drawing. *Tsvet. met.* 27 no.1:62-70 Ja-I '54. (MLRA 10:9)

1. *Mintsvetmetzoloto.*

(Strains and stresses) (Drawing (Metalwork))
(Extrusion (Metals))

PERLIN, I.L., professor; GODERZIANI, K.K., inzhener.

Determining temperature changes during hot rolling of nickel and
MH19 nickel silver ingots. TSvet.met. 27 no.5:58-60 8-0 '54.

(MIRA 10:10)

(Rolling (Metalwork)) (Nickel) (Temperature--Measurement)

ALBISSEYEV, N.S.; BELIAYEV, A.P.; BUGAREV, L.A.; BUTOMO, D.O.; VASIL'YEV, Z.V.;
VERIGIN, V.N.; VOROB'YEV, G.M.; GAYLIT, A.A.; GOL'SHTEYN, P.M.;
GOKHSHTSEYN, M.B.; ZHOLOBOV, V.V.; ZEDIN, N.N.; IVANOV-SKOBLIKOV, N.I.;
KUTEPOV, Ya.V.; LANDIKHOV, A.D.; MARAYEV, S.Ye.; MILLER, L.Ye.;
OL'KHOV, N.P.; PERLIN, I.L.; POSTNIKOV, N.N.; ROZOV, M.N.; CHERNYAK, S.N.;
CHUPRANOV, V.Ya.; TSEKTER, Ya.A.

Vladimir Oskarovich Gagen-Torn; obituary. TSvet.net. 27 no.5:67-68
S-O '54. (MIRA 10:10)

(Gagen-Torn, Vladimir Oskarovich, 1888-1954)

PERLIN, I. L.

124-11-13169

Translation from: Referativnyy Zhurnal, Mekhanika, 1957, Nr 11, p 130 (USSR)

AUTHOR: Perlin, I. L.

TITLE: To a Theory for the Determination of the Initial and Mean Values of the Resistance to Plastic Deformation. (K teorii opredeleniya stinnykh i srednikh znacheniy soprotivleniya plasticheskomu deformirovaniyu.

PERIODICAL: Tr. nauch.-tekhn. o-va chernoy metallurgii, 1955, Vol. 6, pp 54-69

ABSTRACT: The paper examines a method for the determination of the magnitude of the resistance to deformation during metal-working processes as a function of temperature, speed, and degree of deformation.

Formulas are provided for the deformation time element during rolling and pressing processes.

In the calculation of the stresses during continuous-pressure working processes on metals it is necessary that a mean value of the speed coefficient be assumed.

It is noted that the values of the deformation resistance coefficient and the speed coefficient are gradually increased in the sense toward the exit from the center of intense plastic deformation. Therefore, in the calculation of the working stresses it is necessary to assume a mean value for the main deformation area of the deformation resistance.

Card 1/1
(L. A. Sh.)

PZRLIN. I. L., doktor tekhnicheskikh nauk, professor.

On the effectiveness of applying back-pull in wire drawing.
Stal' 15 no.11:1031-1033 N '55. (MIRA 9:1)

1. Moskovskiy institut tsvetnykh metallor i polota.
(Metal drawing)

Perlin, I.L.

PERLIN, I.L.

~~Calculation of forces occurring in the shaping of pipes by drawing.~~ TSvet.met. 28 no.4:66-69 J1-Ag '55. (MIRA 10:11)

1. Mintsvetmetzoloto.

(Pipe) (Drawing (Metalwork)) (Strains and stresses)

Perlin, 2

AKIMOVA, K.I.; BAZHENOV, M.F.; BAKHVALOV, G.T.; BEZAKLUBENKO, N.P.; BERMAN, S.I.;
BOGDANOV, Ye.S.; BODYAKO, M.N.; BOYKO, B.B.; VINOGRADOV, S.V.;
GAGEN-TORN, E.V.; GLEK, T.P.; GOREV, K.V.; GRADUSOV, P.I.; GUSHCHINA, T.N.;
YEMEL'YANOV, A.K.; YESIKOV, M.P.; ZDZIARSKIY, A.V.; ZAKHAROV, M.V.;
ZAKHAROVA, M.I.; KARCHEVSKIY, V.A.; KOMAROV, A.M.; KORZHENKO, O.T.;
LAYNER, V.I.; MAL'TSEV, M.V.; MILLER, L.Ye.; MILOVANOV, A.I.;
MIRONOV, S.S.; NIKONOROVA, N.A.; OL'KHOV, N.P.; OSIPOVA, T.V.;
OSOKIN, N.Ye.; PERLIN, I.L.; PLAKSIN, I.N.; PROKOF'YEV, A.D.;
RUMYANTSEV, M.V.; SEVERDENKO, V.P.; SEREDIN, P.I.; SMIRYAGIN, A.P.;
SPASSKIY, A.G.; TITOV, P.S.; TURKOVSKAYA, A.V.; SHAKHNAZAROV, A.K.;
SHPICHNETSKIY, Ye.S.; YURKSHTOVICH, N.A.; YUSHKOV, A.V.;
YANUSHKOVICH, L.V.

Sergei Ivanovich Gubkin. TSvet.met. 28 no.6:60-61 N-D '55. (MIRA 10:11)
(Gubkin, Sergei Ivanovich, 1898-1955)

PERLIN, I.L.

Various forms and range of application of calculated friction coefficients
used in shaping metals by compression. TSvet.met.29 no.2:75-82 F '56.

(NIRA 9:6)

1. Mintsvetmetzoloto.

(Friction) (Metalworking machinery)

PERLIN, I. I.; GILIS, E.

Determining temperature decrease in the hot rolling of titanium.
TSvet.met. 29 no.5:70-71 My '56. (MLRA 9:8)

1. Mintsvetmetzoloto.
(Titanium--Metallurgy) (Rolling (Metalwork))

PERLIN, I.L., professor.

Orientation significance of coefficients of yield limit rates
of metals being subjected to pressure in hot working. TSvet.
met. 29 no.8:71-72 Ag '56. (MLRA 9:10)

(Metals, Effect of temperature on)

PERLIN, I.L., professor; NIKULIN, A.D., kandidat tekhnicheskikh nauk.

Rolling with large nip angles and the feasibility of intensified
hot rolling of copper and copper-zinc alloys, TSvet.met.29 no.12:
64-69 D '56. (MLRA 10:2)
(Rolling (Metalwork)) (Copper) (Copper-zinc alloys)

STOROZHEV, M.V.; PERLIN, I.L.

"Engineering methods for evaluation of stresses due to metal
presswork." Vest. mash. 36 no.9:83-88 S '56. (MLRA 9:10)

(Strains and stresses) (Metalwork)

PRODUCTION
 MOSYNOLIN, Nikolay Leonovich, kandidat tekhnicheskikh nauk; KRUCHER, Gerasim
 Nikolayevich, inzhener; PERLIN, I. I., professor, retsenzent;
 BELOV, A. P., inzhener, retsenzent; SHPOLYANSKIY, L. Ya., inzhener,
 retsenzent; REZESHIKOV, V. S., redaktor, KAMA Yuzh. O. B., redaktor
 izdatel'stva; VAYNBERG, Ye. B., tekhnicheskiy redaktor

[Production of sheets and strips from light-weight alloys] Proizvod-
 stvo listov i lent iz legkikh splavov. Moskva, Gos. nauchno-tekhn.
 izd-vo lit-ry po Chernoi i svetloi metallurgii, 1967. 310 p.
 (MLRA 10-10)

(Rolling (Metalwork))

~~PERLIN, Il'ya Lvovich~~; GUBKIN, S.I., zasluzhennyi deyatel' nauki i tekhniki, professor, doktor, retsenzent [deceased]; KORNEYEV, N.I., professor, doktor, retsenzent; RURA, A.M., kandidat tekhnicheskikh nauk, retsenzent; NIKONOV, I.Ye., inzhener, retsenzent; GLIKIN, N.M., redaktor; MEL'KIND, L.M., redaktor izdatel'stva; BERLOV, A.P., tekhnicheskii redaktor

[Theory of drawing] Teoriia volochenia. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po cherno i tsvetnoi metallurgii, 1957.
424 p. (MIRA 10:8)

(Drawing (Metalwork))

AUTHOR: Perlin, I. I.

136-9-12/14

TITLE: Calculation of pressures in the extrusion of rods, tubes and sections. (Raschet davleniy pri pressovanii prutov, trub i profiley).

PERIODICAL: Tsvetnyye Metally, 1957, No. 9, pp. 73-81 (USSR).

ABSTRACT: Basing himself on the materials of the discussion of methods of calculating extrusion pressures conducted in this journal in 1951-1955, the author has developed more precise methods of calculating friction forces. He shows the derivations of his equations and gives formulae for calculating forces due to internal stresses resisting the main deformation, the surface friction force of the metal in the reduction part of the deformed zone, the friction force between the extruded metal and the calibrating belt of the die, the friction force between the ingot and the container surface and needle. The formulae apply to the production of round and not round sections and tube from round ingots and of rectangular strip from a rectangular ingot. There are 6 figures, 1 table and 5 references, all of which are Russian.

ASSOCIATION: Mintsvetmetzoloto.

AVAILABLE: Library of Congress.

Card 1/1 1. Metals-Extrusion 2. Mathematical analysis

137-58-6-12145

Translation from Referativnyy zhurnal. Metallurgiya, 1958, Nr 6, p 138 (USSR)

AUTHORS Perlin I L., Goderzian, K.K.

TITLE The Effect of Rolling Rate, Temperature, and Degree of Deformation in a Single Pass on the Specific Pressures Arising During Hot Rolling of Nickel and German Silver MN19 (Vliyaniye skorosti prokatki, temperatury i stepeni deformatsii za prokhd na udel'noye davleniye pri goryachey prokatke nikelya i mel khiora MN19)

PERIODICAL Tr. Gos. n. i. proyekt. in-ta po obrabotke tsvetn. met., 1957, Nr 17, pp 5-18

ABSTRACT An investigation was carried out in order to establish the basic factors affecting the specific pressure (SP) which arises during hot rolling of nickel and German Silver (GS). Blanks with a cross section of 70x70 mm and an initial length of 300-350 mm were rolled in a two-high rolling mill with rolls having a diameter of 400 mm. It was established that at rolling velocities (RV) of 0.9, 2.2 and 3.5 m/sec. and reductions of 10, 20, and 30%, at temperatures ranging from 1200-1000°C in case of Ni and 1050-850° in the case of GS, the SP is proportional to

Card 1/3

137-58-6-12145

The Effect of Rolling Rate, Temperature, and Degree of Deformation (cont.)

85x270x550 mm. The values of the SP obtained in two series of such experiments coincided satisfactorily.

A.N.

1. Nickel--processing 2. Copper-nickel-zinc alloys--Processing 3. Nickel--deformation
4. Copper-nickel-zinc alloys--deformation 5. Mechanisms--Application 6. Rolling mills

Card 3/3

137-58-6 12145

The Effect of Rolling Rate Temperature and Degree of Deformation (cont.)

the ultimate tensile strength (at a corresponding temperature of deformation) and may be determined by the formula: $\sigma = C \cdot \epsilon^n$. On the basis of experimental data the magnitude of the coefficient C was determined for various degrees of deformation and various RV's. If a rolling operation involves metal blanks and rolls with dimensions different than those employed in the experiment, the effect of these factors should be taken into consideration by introducing appropriate coefficients. At RV's from 0.9 m/sec to 3.5 m/sec and at 20% reduction of a Ni or GS blank in a single pass, the SP was determined as a linear function of the RV as expressed by the following linear equation: $P = P_{v0} + A \cdot \Delta V_x$ where A is a velocity coefficient which is equal to the slope of a straight line and which is found to be equal to 1.4 in case of Ni and 0.78 in the case of GS. It was established that the formulae of Gubkin, Tselikov, and Petrov are qualitatively correct in their consideration of the basic factors affecting the SP. In order to obtain accurate results, it is essential that correction coefficients which have been determined for the SP formulae at RV's ranging from 0.9 to 3.5 m/sec, be introduced into the formulae presented above. Experimental rolling of Ni ingots was performed in the rolling shop of the Ordzhonikidze plant on a mill with rolls 566 mm in diameter at a RV of 0.8 m/sec in order to verify the correctness of the SP values obtained under shop conditions. The dimensions of the ingots were

Card 2/3

137-58-4-7032

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 104 (USSR)

AUTHORS: Perlin, I. L., Goderzian, K. K.

TITLE: Spreading of Nickel and MN19 German Silver (Ushireniye nikelya i mel'khiora MN19)

PERIODICAL: Tr. Gos. n.-i. i proyekt. in-ta po obrabotke tsvetn. met., 1957, Nr 17, pp 38-46

ABSTRACT: An investigation was made of the quantitative effect of the particular rolling (R) procedure on the spreading (S) of Ni and of German silver, and certain existing formulas were recommended which yield results pertinent to the given circumstances. R of Ni billets measuring 85x275 and 85x215 mm was performed on a 750 mill, R speed being 1.8 m/sec, and the temperature at the start of R being 1090°. The investigation showed that the width of the strip affected S when $B/H < 4$. The effects of temperature, speed, and degree of deformation were investigated in the R of billets in which $B/H = 1-1.5$, with 10, 20, and 30 percent reductions at temperatures of 1000-1200° for Ni and 850-1050° for German silver. R was performed on a 400 mm mill. Analysis of the data showed that, under the given conditions, the tempera-

Card 1/2

137-58-4-7032

Spreading of Nickel and MN19 German Silver

ture and rate of R had virtually no effect on S. As the degree of deformation was raised from 10 to 30 percent, the S of Ni and German silver increased from 3 to 10 percent. The investigation showed that the Petrov formula is valid for specimens in which the $B/H=1-1.5$ ratio obtains. The Kheyn and the Gubkin formulas give somewhat different results, and the Sedlachek and Ekelund equations yield excessively elevated results. The Kheyn equation, with the C coefficient constant at 1.54, is recommended for calculation of S at B/H ratios of up to 6.

1. Nickel--Rolling--Theory
2. German silver--Rolling--Theory

Yu. F.

Card 2/2

SOV/137-58-8-16897

Translation from Referativnyy zhurnal, Metallurgiya 1958, Nr 8, p 97 (USSR)

AUTHORS Kuz'mina, N.S., Perlin, I.L.

TITLE: Strength Characteristics of MN5 Alloy Under Conditions of Cold and Hot Pressworking (Prochnostnyye kharakteristiki splava MN5 v usloviyakh kholodnoy i goryachey obrabotki davleniyem)

PERIODICAL Sb. nauchn. tr. Mosk. in tsvetn. met. i zolota. 1957 Nr 27, pp 282-299

ABSTRACT: An examination is made of the mechanical and production characteristics of MN5 alloy in the light of methods of pressworking. Investigations of the properties of MN5 alloy show 1. Maximum and minimum Ni and Fe contents in MN5 alloy (the limits being those of the Technical Specifications) show a difference of 6-7 kg/mm² in σ_b . Approximately the same change in σ_b is induced by the change in the dimensions of the initial billet for drawing. 2. The temperature interval for maximum plasticity (P) of MN5 alloy is 800-1000°C, the minimum P being 550-700°. If Ni and Fe contents are at the maximum provided by the Technical Specifications, the zone of maximum P is shifted approximately 100° upward in temperature. An

Card 1/2

SOV/137 58-8 16897

Strength Characteristics of MN5 Alloy (cont.)

increase in strain (S) rate from 0.305 to 2.56%/sec increases σ_b up to 500⁰ this increase is insignificant, whereas in the high temperature region it attains 8 kg/mm². 3. The results obtained for the ratio of true σ_s to duration of S (S rate) further confirm the absolute necessity of considering degree of S. 4. Time of S (rate) exercises its major effect at the higher temperatures. The rate coefficient of MN5 alloy in the S rate interval of 0.305-2.56%/sec attains 4.26 when the degree of S is up to 60% and the temperature is 1000⁰

Ye L.

1. Alloys--Processing
2. Alloys--Mechanical properties
3. Alloys--Temperature factors

Card 2/2

SOV/137-58-9-18955

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 113 (USSR)

AUTHOR: Perlin, I.I.

TITLE: On the Maximum Possible Degree of Reduction in Rolling With Smooth Rolls (O maksimal'no vozmozhnoy stepeni deformatsii pri prokatke v gladkikh valkakh)

PERIODICAL: V sb.: Prokatn. i trubn. proiz-vo. Moscow, Metallurgizdat, 1958, pp 5-9

ABSTRACT: The problem under examination resolves itself to the following: Is it possible, with a given roll diameter, D , to determine a starting strip thickness H , which by a single pass through the rolls can be reduced to any given required thickness, no matter how small, or, in other words, is it possible to roll such a strip in a single pass with any given degree of reduction, no matter how great it may be? It is impossible to resolve this problem experimentally, as the elasticity of the roll-stand components prevents it. A theoretical solution of this question, as advanced in this article, shows that production of a rolled strip of very slight thickness is possible only with very small initial thicknesses and finite degrees of reduction in a single

Card 1/2

SOV/137-58-9-18955

On the Maximum Possible Degree of Reduction in Rolling With Smooth Rolls
pass. No matter what the final roll diameter, rolling with any desired great relative reduction in a single pass is impossible even if the rolling-equipment parts are absolutely rigid. The condition $H < D(1 - \cos \rho)$, determining the maximum possible reductions per pass in accordance with the contact angle is attainable only under conditions in which the angle of friction is greater than the contact angle at every single point along the contact arc, i.e., when the final thickness of the strip is not less than some ultimate limiting value.

B.Ts.

1. Rolling mills--Operation 2. Rolling mills--Theory

Card 2/2

PERLIN, I. L.

AUTHOR: Perlin, I. L., Professor

122-2-14/33

TITLE: Contribution to the Derivation of the Siebel Formula for the Upsetting of a Round Cylinder (K vyvodu formuly zhitelya pri osazhivanii kruglogo tsilindra)

PERIODICAL: Vestnik Mashinostroyeniya, 1958, No.2, pp. 44-45 (USSR).

ABSTRACT: The Siebel formula (Eq.7) expresses the mean direct stress at the contact surface by the height and diameter of the upset cylinder, together with the material properties. It is derived from the differential equation of equilibrium of an elementary volume together with the condition of plasticity and the assumption that the friction stress over the contact surface is constant and the deformation of the cylinder proceeds uniformly. The present note shows the use of the method based on the equation of equality of the power inputs of the active and reactive forces. The simplicity of the derivation of the Siebel formula illustrates the usefulness of this concept also in other press-forming problems. There are 1 figure and 3 Russian references.

AVAILABLE: Library of Congress

Card 1/1

SOV/149-58-6-18/19

AUTHORS: Belyayev, A.I. and Perlin, I.L.

TITLE: Hungarian Non-ferrous Metals Industry
(Vengerskaya promyshlennost' tsvetnykh metallov)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Tsvetnaya
Metallurgiya, 1958, Nr 6, pp 143 - 146 (USSR)

ABSTRACT: The material for this report was collected by the authors during their three weeks' stay in Hungary in July, 1958, when they made an extensive tour of the aluminium-producing plants and factories engaged in working and processing other non-ferrous and rare metals. The Hungarian aluminium industry, based on large deposits of high-grade bauxite ore, has been in existence since 1930, and at present it comprises 5 plants; those at Magyaróvár and Almásfüzitő produce alumina only; both alumina and aluminium are produced at Ajka, while plants situated at Tatabánya and Inota produce aluminium only. Owing to the high quality of the Hungarian bauxite, the Bayer process is used exclusively for the preparation of pure alumina, the following features being listed by the authors as characteristic for the Hungarian practice: 1) low consumption of steam (at present 6 tons of steam per 1 ton

Card1/4

SOV/149-58-6-18/19

Hungarian Non-ferrous Metals Industry

of alumina) attained by efficient utilisation of secondary steam; 2) application of a causticising treatment of the red mud which helped to reduce the consumption of fresh sodium hydroxide to 30-35 kg per 1 ton of alumina; 3) development of a process for electrolytic extraction of gallium from strong alkaline solutions with the aid of a mercury cathode; 4) treatment of the vanadium-bearing residue to produce pure vanadium pentoxide (the residue crystallises out of strong alkaline solution when its temperature is lowered to 45-50 °C); 5) application of aluminium hydroxide instead of paper pulp for filtering aluminate solutions in the Kelly filters. As regards production of primary aluminium, the Hall-Heroult process is used for this purpose. The operating conditions of the reduction cells are different in various plants, the current employed and the current density varying from 28 000 A and 1.1 A/cm² at Tatabanya, to 50 000 - 60 000 A, 0.7-0.76 A/cm² at Inota. The cryolite ratio of the electrolyte (to which no other additions are introduced) is maintained at 2.5 to 2.7.

Card2/4

Hungarian Non-ferrous Metals Industry

SOV/149-58-6-18/19

The metal yield obtained per current unit is 86 to 87% of the theoretical. Mechanisation is used to a large extent as a result of which the manpower required to produce 1 ton of aluminium has been reduced from 130 to 60-50 man-hours. Pure aluminium is produced by a method based on the Hoopes process, with the cell using 28 000 A at the current density of 0.55 A/cm^2 , and the power consumption being 19 000 kWh per ton of 99.99% purity metal. To supply the steadily growing needs of other branches of the Hungarian industry, the metal working industry produces strip, sheet, foil, tubes, wire and a large variety of other wrought and cast forms in aluminium-, copper- and nickel-based alloys. Owing to the wide range of these products fabricated at present in comparatively small quantities, batch production methods are usually employed which result in low overall efficiency and high production costs. As regarding the technological achievement in this field, the following were considered to be worth mentioned: 1) high quality of the copper cathodes (clean and smooth surface); 2) very good surface finish of aluminium and duralumin

Card3/4

SOV/149-58-6-18/19

Hungarian Non-ferrous Metals Industry

sheet achieved by careful polishing of the rolls and by effective cleaning (mechanical and chemical) of the rolled materials; 3) very good surface finish of aluminium and Aldrey (Al-Mg alloy) wire resulting from the application of extruded wire rod; development (still in the experimental stage) of an electrolyte containing boron salts, with the aid of which electrolytic aluminium with electrical conductivity increased by 2-3% can be produced; 5) introduction of the recently developed "Sigma Test" for determination of the electrical conductivity of cast bars with the aid of which faulty material can be detected in the early stages of the manufacturing process; 6) high degree of surface cleanliness of the fine copper wire attained when the finished product is to be enamelled; 7) very good surface finish of tungsten wire achieved by the application of electrolytic polishing.

Card4/4

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 280 (USSR) SOV/137-59-3-6877

AUTHORS: Perlin, I. L., Kochish, I

TITLE: On the Magnitude of the Stresses Arising During the Extrusion of Solid Round Shapes Made of Al and its Alloys (O velichine rabochikh napryazheniy pri pressovanii sploshnykh kruglykh profiley iz alyuminiya i yego splavov)

PERIODICAL: Sb. nauchn. tr. Nauchno-tekhn. o-vo tsvetn. metallurgii, Mosk in-t tsvetn. met i zolota, 1958, Nr 29, pp 252-259

ABSTRACT: The authors propose the following simplified formula for the determination of stresses prevailing at the dummy block of an extrusion press:

$$\sigma_{db} = \tau_f 4 L_1 / D_N + k \log_e (S_N + 1/S_K) + \tau_f 4 l_K / D_K$$

where D_N and D_K are, respectively, the diameters of the ingot and the rod after extrusion; S_N and S_K the cross sectional areas of the ingot and the rod after extrusion; τ_f and τ_f the stresses due to friction forces on the container and on the front surface of the die;

Card 1/2

SOV/137-59-3-6877

On the Magnitude of the Stresses Arising During the Extrusion of Solid (cont.)

k the mean stress at the beginning of the area of deformation of the die (without taking into account the friction forces on the perimeter of the die opening) when $S_N/S_K = 2.73$; L_i the length of the ingot after extrusion; l_K the length of the perimeter of the die opening. The magnitude of the k was determined experimentally by simulating the process of extrusion of Al and its alloys D16, D1, and AMts on a 100-ton hydraulic press. It was established that the value of k is independent of the degree of deformation and that it is not significantly affected (less than by 15%) by the velocity of the dummy block. Graphs are presented showing the variations of k as a function of temperature in the process of extrusion of circular shapes made of Al or of its alloys. Experimental and calculated results are in sufficiently close agreement for practical computations

M Ts

Card 2/2

SOV/123-59-15-59370

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 15, p 73 - 74 (USSR)

AUTHORS: Perlin, I.L., Kochish, I.

TITLE: On the Shape (Contour) of the Sliding Surface of the Seat of Plastic Deformation at the Pressing of Massive Round Profiles

PERIODICAL: Sb. nauchn. tr. Nauchno-tekhn. o-vo tsvetn. metallurgii, Mosk. in-t tsvetn. met. i zolota, 1958, Nr 29, pp 260 - 265

ABSTRACT: The effects of the degree of deformation, temperature and method of pressing, strength characteristics of the metal and shape of a die on the shape of the sliding surface at the pressing of round massive profiles were investigated. Pressing tests were made with Pb-rods of 42 mm in diameter, at room temperature and a degree of deformation (when stretched) of 25 to 169, with lamellar plastios, duraluminum and D 1 (rods of 42 mm in dia-

Card 1/2

90V/123-59-15-59370

On the Shape (Contour) of the Sliding Surface of the Seat of Plastic Deformation at the Pressing of Massive Round Profiles

meter) at 400 and 500°C, and aluminum. It was established that strength characteristics, temperature, conditions of lateral friction and other factors have an important effect on the shape of the deformation seat. 6 figures, 2 references.

M.G.N.

Card 2/2

AUTHOR: I.L. Perlin

SCV/136-58-9-12/21

TITLE: Stability of the Process of Drawing Tube through a Die with a Self-adjusting (Floating) Mandrel (Ob ustoychivosti protsessy volocheniya trub cherez voloku s samoustanavlivayushcheysoy (plavayushchey) opravkoy)

PERIODICAL: Tsvetnyye Metally, 1958, Nr 9, pp 58-61 (USSR)

ABSTRACT: From an additional analysis of forces acting during tube drawing of tubes through a die with a self-adjusting mandrel in the limiting forward (Fig 1) and back position in the absence of contact friction (Fig 2) and in the general case (Fig 3), the author draws the following conclusions: the stability of the process increases with decreasing taper of die and mandrel and coefficient of friction. The angle at the point of the mandrel, the diameter of the barrel of the mandrel and the length of its cylindrical part should increase or decrease together. As an essential requirement for the drawing process he postulates the least tapers of die and mandrel consistent with the requirements that the angle of friction on the mandrel cone must be less than its taper, but sufficient

Card 1/2

SOV/136-58-9-12/21
Stability of the Process of Drawing Tube through a Die with a
Self-adjusting (Floating) Mandrel

to provide the necessary co-efficient of reserve of
strength of the drawn part of the tube; another require-
ment is that the contact-friction coefficient be reduced
as far as possible by polishing and lubrication.

There are 3 figures

Card2/2 1. Pipes--Production 2. Industrial plants--Equipment 3. Materials
 --Lubrication

ZHOLOBOV, Viktor Vladimirovich; ZVEREV, Grigoriy Ivanovich; GUBKIN, S.I.,
prof., doktor khim.nauk, retsenzent [deceased]; PROZOROV, L.V.,
doktor tekhn.nauk, retsenzent; ROZANOV, M.V., inzh., retsenzent;
ZADOV, Ye.B., inzh., retsenzent; PERLIN, I.L., prof., doktor tekhn.
nauk, red.; RZHEZNIKOV, V.S., red.; ARKHANGEL'SKAYA, M.S., red.
izd-va; VAYNSHTEYN, Ye.B., tekhn.red.

[Press forging of metals] Pressovanie metallov. Pod red. I.L.
Perlina. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i
tsvetnoi metallurgii, 1959. 542 p. (MIRA 12:12)

1. Deystvitel'nyy chlen AN BSSR (for Gubkin).
(Forging) (Drawing (Metalwork)) (Extrusion (Metalwork))

SOV/136-59-3-15/21

AUTHOR: Perlin, I.L.

TITLE: Determination of the Efficiency of Multiple Processes
in the Press-working of Metals (Opredeleniye effektiv-
nosti mnogonitochnykh protsessov v obrabotke metallov
davleniyem)

PERIODICAL: Tsvetnyye Metally, 1959, Nr 3, pp 66 - 68 (USSR)

ABSTRACT: The author notes the increasing use being made of multi-thread methods in rolling and drawing and goes on to discuss the effectiveness of this technique in improving productivity. He shows that the simple assumption that the difference between total time and machine time per thread when several are being worked simultaneously is the same as the difference when a single thread is being worked is invalid. Factors such as the increase in the time for dealing with breakages with increasing number of threads must be allowed for and this is done in an expression deduced by the author for the effectiveness of multi-thread methods (i.e. the ratio to the time per thread in multi-thread drawing to that for a single thread worked at the same speed. This equation, however, contains a dimensionless coefficient not easily expressed analytically. The author

Card1/2

SOV/136-59-3-15/21
Determination of the Efficiency of Multiple Processes in the
Press-working of Metals

therefore deduces another approximate method for calculating the effectiveness taking rod drawings as the example. This method is based on the assumption that the machine-time coefficient changes, with increasing number of thread, according to the law of decreasing geometrical progression whose denominator is the coefficient for the single-thread process. The author obtains some numerical values for the optimal number of threads and maximal effectiveness for different values of the latter coefficient.

Card 2/2

SOV/136-59-7-12/20

AUTHORS: Perlin, I.L. and Korol', V.K.

TITLE: Stress Conditions in the Extrusion of Tubes of Type
TsAM 9-1.5

PERIODICAL: Tsvetnyye metally, 1959, Nr 7, pp 69-74 (USSR)

ABSTRACT: The object of the work described was to get more precise information on the influence of heating temperature and extruding speed on the quality of TsAM 9-1.5 zinc-alloy (GOST 7117-54) tubes. These are widely used as substitutes for antifriction bronzes. Published information (Refs 1-5) on such alloys is discordant. The experiments, in which Yu. Ya. Kozharin participated, were carried out with a 100-ton hydraulic press and a container provided with nichrome heaters, which also heated the extrusion ram. Temperatures during extrusion were measured with a contact thermocouple on the tube surface near the die; stresses with the aid of resistance strain gauges. Average extrusion speed was found from the ratio of the stroke to the duration of the extrusion process, a type POB-14 oscillograph and a published (Ref 7) circuit being used. Fig 1

Card 1/3